Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Appropriate Framework for Broadband	)	
Access to the Internet over Wireline Facilities	)	CC Docket No. 02-33
	)	
Universal Service Obligations of Broadband	)	
Providers	)	
	)	
Computer III Further Remand Proceedings:	)	CC Docket Nos. 95-20, 98-10
Bell Operating Company Provision of	)	
Enhanced Services; 1998 Biennial Regulatory	)	
Review – Review of Computer III and ONA	)	
Safeguards and Requirements	)	

COMMENTS OF TELECOMMUNICATIONS FOR THE DEAF, INC.

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COMMENTS OF
TELECOMMUNICATIONS FOR THE DEAF, INC.

Telecommunications for the Deaf, Inc. ("TDI"), by its attorneys, submits these comments in response to the above-captioned notice of proposed rulemaking examining the appropriate regulatory framework for broadband access to the Internet over wireline facilities.[1]

TDI is a national advocacy organization that seeks to promote equal access issues in telecommunications and media for the twenty-eight million Americans who are deaf, hard-of-hearing, late-deafened, or deaf-blind so that they may enjoy the opportunities and benefits of the telecommunications revolution to which they are entitled. TDI educates and encourages consumer involvement regarding legal rights to telecommunications accessibility; provides technical assistance and consultation to industry, associations, and individuals; encourages accessible applications of existing and emerging telecommunications and media technologies in

all sectors of the community; advises on and promotes the uniformity of standards for telecommunications technologies; works in collaboration with other disability organizations, government, industry, and academia; develops and advocates national policies that support accessibility issues; and publishes the quarterly GA-SK Newsletter[2] and the annual *Blue Book, TDI National Directory & Resource Guide for Equal Access in Telecommunications and Media for People Who Are Deaf, Late-Deafened, Hard-of-Hearing or Deaf-Blind.* Furthermore, only by ensuring equal access for all Americans will society benefit from the myriad skills and talents of persons with disabilities.

TDI is greatly concerned about the Commission's proposal to reclassify wireline broadband Internet access as an "information service" rather than a "telecommunications service." In response to the Commission's request for comments regarding the applicability of Section 255 to the Commission's proposed policy change, TDI asserts that if the Commission were to follow through on this proposal, telephone companies would certainly be granted additional freedoms, notably the freedom to discriminate against individuals with disabilities.[3] The Commission must not undermine the intent of the Telecommunications Act by taking such a radical step. At a minimum, the Commission must once again exercise its regulatory authority over information services to ensure access to information services on a level equivalent to access to telecommunications services.

The Commission is well aware of the value of access to the Internet to persons with disabilities. As the Commission recently reaffirmed, Internet access through advanced services

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[1] *Appropriate Framework for Broadband Access to the Internet over Wireline Facilities*, Notice of Proposed Rulemaking, CC Docket No. 02-33, FCC 02-42, (rel. Feb. 15, 2002) ("NPRM").

has the potential to provide significant opportunities for persons with disabilities.[4] In particular, advanced services may enable persons with hearing disabilities to communicate freely with friends and relatives.[5] The Commission has also recognized that persons with disabilities face significant impediments to their ability to access advanced services. Individuals with disabilities are less likely than the general population to have access to computers and the Internet.[6] In addition, more than 75% of persons with disabilities are unemployed, and thus often lack financial resources to obtain advanced services.[7]

At the same time, Internet access now provides significant opportunities to improve the lives of persons with hearing disabilities. As Commissioner Copps told the 14th Biennial International Conference of TDI last year, "Call it the IT economy, the Digital Age, the World Wide Web or whatever you will, it is rocketing us into cyberspace at the speed of light. It's valuable cyberspace, because what we find there are the education and information and commerce and jobs of America's future. Those who get there win; those we don't get there lose.

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2 GA (Go Ahead, which follows a typed message and informs the recipient that the typist is ready for a response) and SK (Stop Keying, which ends a TTY conversation) are the two most frequently used abbreviations in telegraphy and TTY conversations.

3 NPRM at ¶ 59.

4 *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable And Timely Fashion, and Possible Steps To Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996*, CC Docket 98-146, Third Report (rel. Feb. 6, 2002) at ¶ 103 ("*Third Report*").

5 *Id.*

6 *See* US Department of Commerce, Economics and Statistics Administration, National Telecommunications and Information Administration, *A Nation Online: How Americans Are Expanding Their Use of the Internet* (Feb. 2002) at 67, Table 7-3.

7 *See Provision of Improved Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, CC Dkt. No. 98-67, Declaratory Ruling and Second Further Notice of Proposed Rulemaking, FCC 02-121 (rel. Apr. 22, 2002) ("*WorldCom IP Relay Order*"), Statement of Commissioner Michael J. Copps.

I want to contribute to making sure we all get there, and that in the vanguard, traveling at the speed of light, is America's disability community."[8]

The Commission has already taken steps in that positive direction. Just last week, the Commission authorized WorldCom, Inc., to recover costs associated with Internet protocol relay service ("IP Relay") from the federal Telecommunications Relay Service ("TRS") fund.[9] IP Relay allows any person with access to the Internet through a computer, a web-enabled wireless phone, a personal digital assistant, or any other IP-capable device to access WorldCom's telecommunications relay center.[10] Thus, service is not limited to places that are equipped with TTYs or specialized software.[11] In addition, persons with computers or other Internet-accessible devices do not need to also buy TTYs in order to access the relay service. The Commission has identified a number of benefits of WorldCom's IP Relay service.

IP Relay has the potential to offer greater benefits as well. It greatly simplifies two-line voice carryover ("VCO") service by permitting VCO functionality without extra telephone lines or three-way calling. Access to services like these will enable persons with hearing disabilities significantly greater opportunities to communicate with family and friends, as well as conduct business in ways previously unavailable.

While Internet access opens doors of opportunity to persons with disabilities, broadband Internet access provides orders of magnitude more to people with hearing disabilities.

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8 Remarks of Michael J. Copps, Commissioner, Federal Communications Commission, at the 14th Biennial International Conference, Telecommunications for the Deaf, Inc., Sioux Falls, South Dakota, July 10, 2001 (emphasis added) ("*Copps Speech to TDI*").

9 *WorldCom IP Relay Order.*

10 *Id.* at ¶ 4.

11 *Id.*

Broadband Internet access provides two distinct features that dial-up cannot viably provide: real-time video streaming, and data signals immediately convertible to alternative protocols.[12]

Real-time video streaming will permit a person with hearing disabilities to access remote interpreting and peer-to-peer signing in breathtaking ways. One type of remote interpreting, Video Relay Service, "allows TRS users with hearing or speech disabilities to communicate with voice telephone users through video equipment installed at the user's premises and at the relay center. This video link allows a [communications assistant] to view and interpret the caller's sign language and relay the conversation to a voice caller."[13] Standard video streaming arrangements over the Internet could be used to provide remote interpreting. With access to broadband connections, interpreters for persons with hearing disabilities could become centralized in a single location, and could interpret live events to be broadcast over the Internet. The benefits of persons with hearing disabilities being able to access an interpreter at any time of the day or night through a broadband Internet connection are enormous. A deaf student needing research assistance in a library could have a remote interpreter explain her needs to the librarian standing nearby, even though the interpreter could be hundreds of miles away. Police could interview hard-of-hearing witnesses immediately, without having to wait for interpreters to arrive on the scene. These opportunities are possible through real-time video streaming, which can only be considered viable through broadband connections.

While remote interpreting provides significant opportunities for persons with hearing disabilities, peer-to-peer signing through real-time video streaming may have even more valuable

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[12] *See* Frank G. Bowe, *Broadband and Americans with Disabilities* (May 2002), available at http://www.newmillenniumresearch.org/broadband.html.

benefits. Persons born with hearing disabilities often read and write at elementary levels, but they are able to sign proficiently. Sign-language conversations between persons with hearing disabilities carried over the Internet would provide many new opportunities to communicate. Persons with hearing disabilities could take advantage of mental health counseling and distance learning programs previously unavailable. Public interest organizations like TDI, the National Association for the Deaf, and the FCC could post important messages on their websites in video streaming format with sign language for the deaf and hard-of-hearing community.

While these opportunities provide great benefits, it is hard to imagine a greater benefit to persons with hearing disabilities than the ability to communicate with friends and family through peer-to-peer signing carried over the Internet. The ability for a person with hearing disabilities to actually see the person with whom he is communicating vastly improves the level of communication over what is currently available through TTY devices.

Of course, video streaming requires significant bandwidth, so access to broadband services is essential for persons with hearing disabilities to communicate via sign language over great distances. But with such broadband access on both ends of the communication, vast new worlds of opportunity become available to the deaf or hard-of-hearing.

Another benefit derived from broadband comes from the fact that broadband allows a digital signal to be transmitted from end to end. Digital signals could be reformatted from their original form into a format accessible to persons with hearing disabilities. Speech recognition

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[13] *Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, CC Docket No. 98-67, Report and Order and Further Notice Of Proposed Rulemaking, FCC 00-56 (rel. Mar. 6, 2000).

software could translate the bits and bytes of real-time audio into text. Internet audio, such as National Public Radio or C-SPAN, could be available to persons with hearing disabilities.[14]

Another area of great need that broadband can solve is captioning. Captioning has the potential to benefit for more than 100 million Americans. According to the National Institute on Deafness and Other Communication Disorders:

> An estimated 28 million Americans now have hearing loss, and the number is growing rapidly as the baby boom generation ages. It is also important to remember that many people would benefit from captioning, not just those with hearing loss. Captioning has been found to be very beneficial to improving the reading skills of America's 26 million elementary school children. It is also extremely helpful to the nation's 30 million people learning English as a second language and 40 million individuals over the age of 16 learning literacy skills.

While captioning is prevalent in television and mainstream movies out on video and DVD, there is a dearth of captioned materials available on the Internet used with streaming video. Broadband will be able to accommodate the extra bandwidth needed to carry the captioning data. Many government agency websites already provide captioned video as a result of their compliance with Section 508 of the Rehabilitation Act.[15]

Yet the Commission's proposal in this proceeding threatens to destroy such opportunities for the hearing disabled. This is because Section 255 of the Telecommunications Act requires that "a provider of *telecommunications service* shall ensure that *the service* is accessible and usable by individuals with disabilities, if readily achievable."[16] The Commission established fair and far-reaching requirements for telecommunications providers under Section 255.[17] But on its

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14 *See* Bowe, *supra* note 12.

15 The software tools needed for captioning is available as freeware from the National Center on Accessible Media at http://ncam.wgbh.org/webaccess/magpie/.

16 47 U.S.C. § 255(c).

17 *See Implementation of Sections 255 and 251(a)(2) of the Communications Act of 1934, as Enacted by the Telecommunications Act of 1996; Access to Telecommunications Service, Telecommunications Equipment and*

face, Section 255 and the applicable regulations do not apply to providers of information services.[18] Without the statutory mandate of making broadband telecommunications services and Internet access accessible to persons with hearing disabilities, the deaf and hard-of-hearing community will no longer have the legal right to equal access to extremely important telecommunications services—which Commissioner Copps has called a civil right[19]—that has prompted the provisioning of services under Section 255.

Further, there are not adequate incentives for wireline broadband providers to protect the interests of persons with hearing disabilities.[20] As numerous provisions of the Communications Act recognize, market forces are not necessarily sufficient to meet the needs of those with disabilities, and Congress has instructed the Commission to take such special needs into account in developing its policies concerning advanced services.[21] The Commission's own regulations implementing Section 255 illustrate that market forces alone are insufficient to ensure equal access to telecommunications for persons with disabilities.

Further, the Commission's proposed rule would make it less likely for competitive local exchange carriers ("CLECs") to obtain the inputs necessary for them to provide broadband services in competition with the incumbent local exchange carriers ("ILECs). Thus, the Commission's proposed policy would have the effect of not only placing undue reliance on competitive forces, but would also undermine development of competition necessary to generate those competitive forces. While TDI's position is not to favor one segment of the industry over

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Customer Premises Equipment by Persons with Disabilities, WT Docket No. 96-198, Report and Order and Further Notice of Inquiry, 16 FCC Rcd 6417 (1999) ("*Section 255 Order*").

18 *Id.* at ¶ 78.

19 *Copps Speech to TDI.*

20 *See* NPRM ¶ 60.

21 *See, e.g.*, 47 U.S.C. §§ 225, 251(a)(2), 255, and 610.

another, TDI does favor regulations that promote competition, provide more options and cut costs.

TDI urges the Commission not to rule that wireline broadband Internet services are "information services" rather than "telecommunications services." Nevertheless, should the Commission decide to proceed with its proposed policy, at a minimum it must make adequate assurances through its regulatory authority that wireline broadband services must be accessible to and usable by individuals with disabilities. If wireline broadband services are classified as information services, the Commission would retain Title I ancillary jurisdiction over them.[22] Under that regulatory authority, the Commission must promulgate regulations that mirror the statutory requirements of Section 255. The Commission must rule that a provider of *information services* shall ensure that the service is accessible to and usable by individuals with disabilities, if readily achievable.

The Commission has exercised such Title I jurisdiction regarding provisioning of information services to persons with disabilities before. In the *Section 255 Order*, the Commission ruled that access to certain information services was so essential to persons with disabilities that it would promulgate requirements "comparable to those under Section 255."[23] For the same reasons asserted then to extend Section 255 accessibility requirements to certain information services, the Commission should do the same here, in the event that it reclassifies wireline broadband Internet access as an information service.[24]

Given the nascent nature of wireline broadband Internet access, it is difficult for TDI to state with specificity what sorts of access requirements are needed by people with hearing

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22 *Section 255 Order* at ¶ 93.

23 *Id.*

disabilities. But the potential for vastly improving the lives of the hearing disabled offered by broadband Internet access should not be compromised in any way. For example, speech recognition facilities may need to be deployed in local exchange carrier central offices, or signals transmitted over broadband facilities may need to be compatible with hardware installed in an end user's computer. Taking broadband facilities and services out of the requirements of section 255 could relieve a local exchange carrier from accommodating those necessities. Ultimately, whatever information is transmitted over broadband in an audio format should be accessible to persons with hearing disabilities in a visual format. The Commission should not take steps today that deny accessibility to wireline broadband services that could severely impair the development of services for people with hearing disabilities in the future.[25] While the Commission has envisioned certain freedoms to telecommunications providers that would stem from its proposed policy, the freedom to discriminate against persons with disabilities should not be one of them.

For the foregoing reasons, the Commission should abandon its proposal to reclassify wireline broadband services as "information services." Without the assurance of equal access by persons with hearing disabilities guaranteed by Section 255, wireline broadband service providers would have the freedom to discriminate. Alternatively, if the Commission were to reclassify wireline broadband services as "information services," it must promulgate regulations simultaneously that require providers of such information services to make their services accessible to and usable by individuals with disabilities, if readily achievable.

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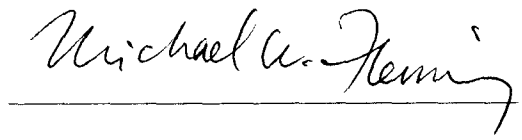
[24] *Id.* at ¶¶ 93-108.

[25] The Commission previously noted that it did not intend to extend its ancillary jurisdiction in this matter over "e-mail, electronic information services, and web pages[.]" *Id.* at ¶ 107. While TDI believes all information services should be accessible to persons with disabilities under Federal law, TDI is not asking the Commission to change that policy decision at this time. In the event that the Commission proceeds with its initial decision to reclassify wireline broadband Internet access as an information service, TDI asks that the protections currently

Respectfully submitted,



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available to persons with disabilities to these telecommunications services, that may otherwise be changed following the reclassification, not be changed but be extended through the Commission's Title I authority.